IN THE CLAIMS

Please amend the claims as follows:

--1. A method for producing a target substance utilizing a microorganism, comprising the steps of:

culturing the microorganism in a medium to produce and accumulate the target substance in the medium; and

collecting the target substance,

wherein

the microorganism is constructed from a parent strain of the microorganism having a respiratory chain pathway of high energy efficiency and a respiratory chain pathway of low energy efficiency as respiratory chain pathways, and

the microorganism is a mutant strain or a genetic recombinant strain having either one or both of the following characteristics:

(A) the respiratory chain pathway of high energy efficiency is enhanced,

(B) the respiratory chain pathway of low energy efficiency is deficient.

2. The method for producing a target substance according to claim 1, wherein the respiratory chain pathway of high energy efficiency is enhanced by:

increasing a copy number of a gene coding for an enzyme involved in the respiratory chain; or

modification of an expression regulatory sequence of the gene.

3. The method for producing a target substance according to Claim 1, wherein the respiratory chain pathway of low energy efficiency is made deficient by disruption of a gene coding for an enzyme involved in the respiratory chain.

4. The method for producing a target substance according to Claim 1, wherein an enzyme of the respiratory chain of high energy efficiency is at least one member selected from the group consisting of SoxM type oxidase, bcl complex, and NDH-1.

5. The method for producing a target substance according to Claim 1, wherein an enzyme of the respiratory chain of low energy efficiency is at least one member selected from the group consisting of cytochrome bd type oxidase and NDH-II.

6. The method for producing a target substance according to Claim 1, wherein the microorganism comprises enhanced SoxM type oxidase activity and deficient NDH-II activity.

7. The method for producing a target substance according to Claim 1, wherein the SoxM type oxidase is cytochrome bo type oxidase.

8. The method for producing a target substance according to Claim 1, wherein the microorganism is at least one member selected from the group consisting of bacterium belonging to the genus *Escherichia* and *Coryneform* bacterium.

9. The method for producing a target substance according to Claim 1, wherein the target substance is at least one member selected from the group consisting of L-amino acids and nucleic acids.--

REMARKS

Claims 1-9 are pending.

The claims have been amended for clarity and to remove multiple dependency. No new matter is believed to be introduced by the amendment to the claims.